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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,099	07/25/2003	Angel Stoyanov	25178	2251

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EXAMINER

GRAY, JILL M

ART UNIT PAPER NUMBER

1774

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/627,099

Applicant(s)

STOYANOV ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/30/04

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Frank et al, 5,916,418 (Frank).

Frank teaches paper comprising a web of cellulosic fibers crosslinked with an aqueous solution of glyoxal, wherein the amount of glyoxal is about 2.5 wt%, per claims 1, 7-9, 11, and 17. See abstract and Example 2. In addition, Frank teaches that his paper has improved whiteness and brightness compared to untreated paper. See column 2, lines 10-13. The composition of Frank is the same as or similar to applicants' and is used in the same amount as applicants. Therefore, the examiner has reason to believe that properties such as the L value, a value, b value and brightness, as required by claims 2-8, 10, and 18 are the same as applicants. Moreover, the same composition necessarily has the same properties.

Accordingly, the teachings of Frank anticipate the invention as claimed in present claims 1-11 and 17-18.

Claims 1-6, 9-11, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Graef 4,853,086.

Graef teaches cellulose fibers treated with glyoxal, per claim 1. The fibers are used to form absorbent products such as cellulose fluff pulp, diapers, adult incontinence products, towels and feminine hygiene products, as required by claims 9 and 11 and 13-16. See column 1, lines 19-22, column 4, lines 29-30 and Example 5. The composition

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of Graef is the same as that contemplated by applicants. Therefore, the examiner has reason to believe that properties such as the L value, a value, b value and brightness, as required by claims 2-6 and 10 are the same as applicants. Moreover, the same composition necessarily has the same properties.

As a result, the teachings of Graef anticipate the invention as claimed in present claims 1-6, 9-11, and 13-16.

Claims 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Willemssen 6,319,558 B1.

Willemssen teaches a superabsorbent coated yarn comprising a yarn that has been treated with a superabsorbent material and an aqueous glyoxal solution. See Example II. As to the L value, the aqueous glyoxal solution appears to be the same or similar to that contemplated by applicants. Accordingly, the examiner has reason to believe that this property is the same as well.

Therefore, the teachings of Willemssen anticipate the invention as claimed in the present claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohler et al, US 2004/0149408 A1 (Kohler) in view of Frank et al, 5,916,418 (Frank), as applied above to claims 1-11 and 17-18.

Kohler teaches surface finishing of paper products or board (claims 17 and 19-20) by applying an aqueous solution of polyethylene glycol and glyoxal crosslinking agent. See [0108]. Kohler does not teach the L value or brightness of his crosslinked product. Frank is as applied above and teaches a composition comprising glycol and glyoxal, wherein the glycol is added to reduce brittleness in the resultant paper to reduce breaking when folded. In addition, Frank teaches compositions solely comprising glyoxal. It would have been obvious to the skilled artisan at the time the invention was made, to surface finish a paper product as taught by Kohler, wherein his composition is modified by excluding the glycol component and thus, the properties associated therewith because paper products such as paperboard necessarily require reduced pliability. Omission of an element and its function where not needed is obvious. *Ex parte Rainu*, 168 USPQ 375 (PTO Bd. Of App. 1969). Regarding the L value and brightness, the composition of Frank is the same as applicants. Accordingly, the examiner has reason to believe that these properties are the same as well.

Therefore, the combined teachings of Kohler and Frank would have rendered obvious the invention as claimed in present claims 17-19.

No claims are allowed.

### ***Conclusion***


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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray  
Examiner  
Art Unit 1774

jmg